A STUDY OF SOCIO ECONOMIC IMPACT ON ACADEMIC AND SPORTS ACHIVEMENT OF MANGALORE UNIVERSITY SPORTSPERSONS

Final Synopsis submitted to Mangalore University in fulfillment of the requirement for the degree of

DOCTOR OF PHYLOSOPHY IN PHYSICAL EDUCATION

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CHAPTER - I
INTRODUCTION

Education refers to the process of assisting in the development of a person's personality through a comprehensive approach in order to prepare that person to succeed in a particular community or culture. Education, in this view, primarily serves the purpose of individual growth. Education starts from birth and lasts throughout the rest of one's life. Given that man's life expectancy has increased in recent years, a person in the current setting must be a lifelong learner. Schooling often begins between the ages of four and six, when children are sent to preschools for specialised education in skills and talents that community considers significant. Earlier, the process was considered complete once official elementary and secondary schooling was completed. Adults, on the other hand, are increasingly studying in informal situations throughout their professional careers and even well into retirement in today's information age. When people's life expectancies were lower,it was normal for a person to finish school until the age of 24 or 25, work from 25 to 58 or 60, and thereafter retire at the age of 58or 60.

1.1 Academic Achievement

Different researchers and scholars define academic performance in different ways. It is defined by the National Council of Educational Research and Training as "the amount of achievement in the courses stated in the curriculum as captured by classroom teaching expertise." Academic achievement, according to Lindholm and Borsato, is defined as a student's success in school and society as assessed by their abilities and competences in numerous areas such as communication, mathematics, science, and critical thinking. Cumulative Grade Point Average, student demeanour, school drop-out rates are only a few of the attainment indicators. Academic achievement, according to Eakman et al. (2019), is defined as the academic success despite a student's academic challenges, such as a non-conducive educational setting, anxiety, family stress, and emotional and social lives.

1.2 Sports Achievement

Student Sports achievement is just as vital as academic achievement. Students compete at several levels of competition, including district, state, national, and international. The student's biggest sporting achievement in his career is his participation at the district, state, national, and international levels. Along with academic achievement, sport achievement is critical for a student's entire growth and development. In today's globalised world, a

student's sporting achievements are critical in obtaining jobs in both the public and commercial sectors.

1.3 Socioeconomics

The analysis of how economics influences the social fabric of a country is known as socioeconomics. 'Society' and 'Social Values' are the terms used to describe the social fabric. Socioeconomics is often referred to as social economics. (Editor, Socioeconomic Elements, 2018) explains that employment, education, and income are the three key factors that influence social status. When a person affords to be a doctor and then a surgeon, he will be able to earn a substantial income, allowing him to maintain a high social standing. He ensures that his children have a decent job, a good salary, a good social status, and so on.

1.4 Statement of the Problem

There are various studies carried out in different part of the world and in different parts of the country regarding the influence of socio-economic factors on the academic performance and on the sports performance of sportspersons. There are similar studies carried out for a specific region and specific University too. The main objective is to study the impact of socio-economic factors on academic and sports performance of sportspersons from Mangalore University. All the students in Mangalore University who were part of sports activities are the respondents of this study. Those students, who were not part of sports in any manner, are not part of this study.

1.5 Objectives of the study

The primary objectives of this study are:

a) To evaluate various factors that signify sports performance and those factors that affect sports performance of an individual.

b) To assess various socio-economic factors that impacts the academic performance of an individual.

c) To assess various socio-economic factors that impacts the sports performance of an individual.

d) To assess whether academic performance affects sports performance of an individual.

1.6 Hypothesis

Hypothesis 1

H_{01}: Academic performance is independent of possession of number of essential household items.

H_{a1}: Academic performance is not independent of possession of number of essential household items.

Hypothesis 2

H_{02}: Academic performance is independent of social status of the family.

H_{a2}: Academic performance is not independent of social status of the family.

Hypothesis 3

H_{03}: Interest in sports is independent of possession of number of essential household items.

H_{a3}: Interest in sports is not independent of possession of number of essential household items.

Hypothesis 4

H_{04}: Interest in sports as a factor of achievement in sports is independent of social status of the family.

H_{a4}: Interest in sports as a factor of achievement in sports is not independent of social status of the family.

Hypothesis 5:

H_{05}: There is no correlation between parents influence as a factor on academic performance and parents influence as a factor on sports performance.

Ha5: There is correlation between parents influence as a factor on academic performance and parents influence as a factor on sports performance.

Hypothesis 6:

H_{06}: There is no correlation between possession of vital household items and number of sports played by sportsperson

H_{a6}: There is correlation between possession of vital household items and number of sports played by sportsperson

Hypothesis 7:

H_{07}: There is no correlation between possession of essential household items and number of sports played by sportsperson

H_{a7}: There is correlation between possession of essential household items and number of sports played by sportsperson

Hypothesis 8:

H_{08}: There is no correlation between possession of desirable household items and number of sports played by sportsperson

H_{a8}: There is correlation between possession of desirable household items and number of sports played by sportsperson

Hypothesis 9:

H_{09}: There is no correlation between social status of the sportsperson and the academic performance of the sportsperson.

H_{a9}: There is correlation between social status of the sportsperson and the academic performance of the sportsperson.

Hypothesis 10:

H_{010}: There is no correlation between social status of the sportsperson and the sport performance of the sportsperson.

H_{a10}: There is correlation between social status of the sportsperson and the sport performance of the sportsperson.

Hypothesis 11:

H_{011}: There is no correlation between type of under-graduate institute sportsperson has studied and the passing grade.

H_{a11}: There is correlation between type of under-graduate institute sportsperson has studied and the passing grade.

Hypothesis 12:

H_{012}: There is no correlation between type of under-graduate institute sportsperson has studied and the sports performance.

H_{a12}: There is correlation between type of under-graduate institute sportsperson has studied and the sports performance.

Hypothesis 13:

H_{013}: There is no correlation between occupancy type and academic performance

H_{a13}: There is correlation between occupancy type and academic performance

Hypothesis 14:

H_{014}: There is no correlation between occupancy type and sports performance

H_{a14}: There is correlation between occupancy type and sports performance

Hypothesis 15:

H_{015}: Influence of parents as a factor of achievement is same across different education levels.

H_{a15}: Influence of parents as a factor of achievement is not same across different education levels.

Hypothesis 16:

H_{016}: Influence of teachers' support as a factor of achievement is same across different education levels.

Ha16: Influence of teachers' support as a factor of achievement is not same across different education levels.

Hypothesis 17:

H_{017}: Financial need as a factor of academic achievement is same across different education levels.

H_{a17}: Financial need as a factor of academic achievement is not same across different education levels.

Hypothesis 18:

H_{018}: Interest in Academics as a factor of academic achievement is same across different education levels.

H_{a18}: Interest in Academics as a factor of academic achievement is not same across different education levels.

Hypothesis 19:

H_{019}: Influence of Parents as a factor of sports achievement is same across different education levels.

H_{a19}: Influence of Parents as a factor of sports achievement is not same across different education levels.

Hypothesis 20:

H_{020}: Support of coach as a factor of sports achievement is same across different education levels.

H_{a19}: Support of coach as a factor of sports achievement is not same across different education levels.

1.7 Limitations of the Study

- This study is limited to students at Mangalore University sports representatives.
- This study is limited to sports factors and academic factors.
- This study is limited to major game Football, Cricket, Kabaddi, Softball, Kho kho and Hockey.
- This study is limited to male Participants only.
- This study is limited to the year 2012- 2015.
- There can be bias response from the respondents while filling the questionnaire.
- Respondents do not answer few of the questions for various reasons best known to them.

CHAPTER - II
REVIEW OF LITERATURE

SES and Sports Factors

SES has an impact on physical activities such as sports. Several socioeconomic factors influence young people's participation in sports. Neighborhood, household, parental income, parental education, housing position from point of access to sports, and others, are among the variables. Several authors have studied various aspects of SES and its impact on student participation in sports.

Eime et al. [17] investigated whether the remoteness of a site and an individual's socioeconomic status have an impact on physical activity participation. They divided physical activity involvement into three categories: first, if they participated in any physical activity, and second, whether they participated fewer than 12 times per year or more than or equal to 12 times per year. They've finally come to a conclusion with an intriguing observation. Physical exercise is unaffected by location or socioeconomic status. The more remote the location, the higher the level of physical activity.This is a fascinating observation because the general public's perception is the polar opposite of this discovery. People sometimes assume that if someone lives in a remote location, it will be impossible for them to participate in any physical activity, particularly team sports. With increasing remoteness of place and lower SES, physical activity reduced only in particular categories of sports..

CHAPTER III
METHODOLOGY

3.1 Sampling Frame

Sampling frame of this research are all the students at Mangalore University who have taken part in sports competitions at University levels. Respondents were randomly picked from the defined sampling frame.

3.2 Sampling Method

Sampling method deployed to pick respondents was simple random sampling after using judgmental method in the first stage. Judgmental sampling because only those who are associated with sports and games were made eligible as being part of sampling frame and from the sampling frame, random sampling method was deployed in order to pick respondents as prescribed by the sample size.

3.3 Sample Size

Sample sizedecided was 204, based on the literature review and advice from different scholars who have worked in similar area. 204 sportspersons from Mangalore University were picked as respondents of the study.

3.4 Selection of Factors

Extensive literature review was carried out to identify the factors relating to socio-economic status, academic performance, sports performance of sportspersons across the globe and then in India, socio-economic factors that impact academic, and sports performance of sportspersons. The factors considered in this study are listed below:

Demographic Variables:

S.No.	Variable / Factor	S.No.	Variable / Factor
1	Education	2	Undergraduate Institution Type
3	Postgraduate Institution Type	4	Family Size
5	Occupancy Type	6	Housing Type
7	Number of Earning Members	8	Earning Members
9	Social Status		

Socio-economic Factors:

S.No.	Variable / Factor	S.No.	Variable / Factor
1	Possession of Smart Phone	2	Number of Vehicles Owned
3	Possession of Television	4	Possession of Refrigerator
5	Possession of Geyser	6	Possession of Washing Machine
7	Possession of Overhead Tank	8	Possession of RO Water System
9	Possession of Gas Stove	10	Possession of Mixer Grinder
11	Possession of Furniture	12	Possession of Music Player
13	Possession of Desktop Computer	14	Possession of Laptop
15	Possession of AC	16	Possession of Air Cooler
17	Possession of Newspaper	18	Number of Account Holders in the Household

Factors Affecting Academic Performance:

S.No.	Variable / Factor	S.No.	Variable / Factor
1	Financial Support for Education	2	Education Status of Father
3	Education Status of Mother	4	School Dropout Status of Father
5	School Dropout Status of Mother	6	Academic Performance in UG
7	Academic Performance in PG	8	Parents' Influence on Academics
9	Teachers' Support in Academics	10	Financial Need as Influencer of Academic Performance
11	Interest in Academics	12	Medals/Awards in Academics

Factors Affecting Sports Performance:

S.No.	Variable / Factor	S.No.	Variable / Factor
1	Parents' Influence on Sports	2	Coach Support in Sports
3	Financial Need as Influencer of Sports Performance	4	Interest in Sports as Factor of Sports Performance
5	Academic Performance as a Factor of Sports Performance	6	Influence of Teammate as a Factor of Sports Performance
7	Financial Support Sought in Sports	8	Top 3 Sports Achievements

3.5 Statistical Analysis

Various statistical tests that are carried out in this study are:

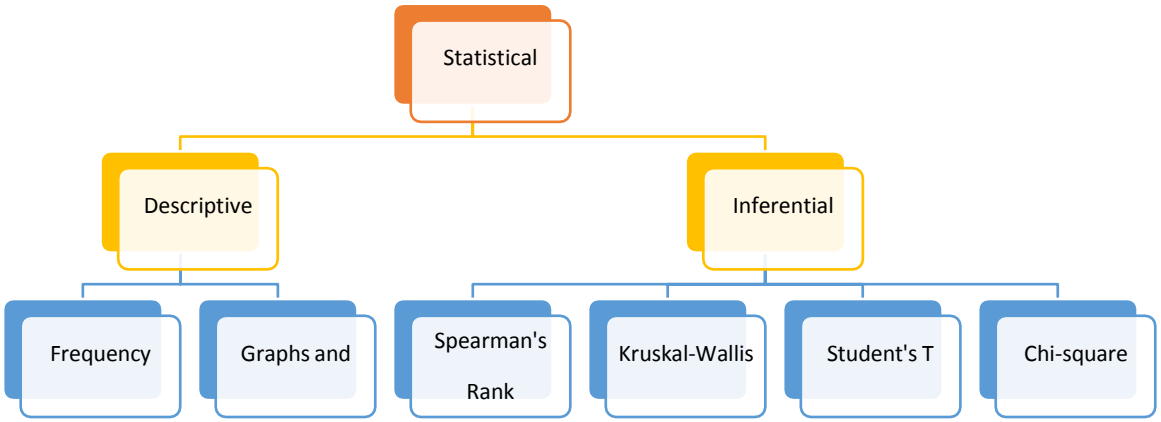

Figure 3.1: Statistical Techniques used in Analysis

Statistical analysis is performed in two parts based on tools and techniques used. First part of the analysis consists of only descriptive statistics.

Descriptive Statistics: Descriptive statistics is part of statistics that describes the data. It summarizes the data. Summary of data can be simple representation using frequency tables, graphs, and charts. It also provides mean, standard deviation, median and other basic parameters in few of the analysis.

Inferential Statistics: Inferential statistics is part of statistics that helps in testing various hypothesis so that sample results obtained can be applied to the population parameters. In this study, the results obtained by studying sample from Mangalore University can be applied to the entire population of sportspersons in the country based on the inferential statistics output. Various hypotheses are tested as shown in the figure 3.1.

Spearman's Rank Correlation: Spearman's Rank Correlation test is like Pearson's Correlation Coefficient. While Pearson's correlation coefficient is to find correlation between two ratio scale variables, Spearman's Rank Correlation can be used to find correlation between two ordinal variables or between one ordinal and one ratio scale variable. Spearman' Rank Correlation test is non-parametric test. Non-parametric tests are those which can be carried out for those variables too for which distribution is not known.

The Spearman's Rank Correlation is represented by $'\rho'$:

$$\text{Spearman's Rank Correlation} = \rho = \frac{6 \sum d_i^2}{(n^2 - 1)}$$

Where 'd' = difference between ranks given by two different variables

n = number of observations and i = observation numbers = 1 to n.

Kruskal Wallis H Test: Kruskal Wallis H test is like ANOVA (**AN**alysis **O**f **VA**riance). While ANOVA is conducted to test the equality of means of two or more independent variables of ratio scale, Kruskal Wallis H Test is conducted to test the equality of two or more independent variables of ordinal scale variables and ratio scale variables too. Since it tests for equality of two or more ordinal scale variables, it is rank-based test, and it is a non-parametric test. It is denoted by 'H' statistic and is givenby the formula:

$$H = \frac{12}{n(n+1)} \sum_{j=1}^{c} \frac{T_j^2}{n_j} - 3(n+1)$$

where,

n_j = j^{th} sample size; c = number of samples

n = sample size sum for all samples; T_j = sum of ranks in the j^{th} sample

Student' T Test: The Student's T Test is based on Student's T distribution. It is similarto normal distribution. It is carried out when the sample size is less than 30 and when population standard deviation is not known. When sample size is greater than or equal to 30, Student's T distribution starts moving towards normal distribution, and when sample size is near 100, it is like normal distribution. It is basically used to test the difference in means of two variables. When the number of variables is more than two, 'F' test is conducted using ANOVA. Comparing the differences of two means is carried out two different types of tests: a) Independent Sample T test and b) Paired Sample T test.

Independent Sample T Test: This test is conducted to test the equality of two means. But the two means are statistically independent, and these means are from two groups. Here the independent variable must be categorical variable while the dependent variable must be ratio scale variable.

Paired Sample T Test: This test is conducted to test the equality of two means, but both the means are collected from the same subject or entity. The data is in pairs.

Chi-square Test: Chi-square test is non-parametric test, and it is to compare multiple proportions. Chi-square test is conducted by comparing observed frequencies with expected frequencies. There are two types of commonly used Chi-square test: a) Test of independence and b) Goodness-of-fit test.

Test of Independence: Test of independence is to test whether one categorical variable is dependent or independent of another categorical variable. It requires crosstabulation of two categorical variables with multiple categories to conduct this test.

Goodness-of-fit test: It is to test whether count of each of the categories of a variable are same or not. It is also used to test whether a variable follows certain type of probability distribution or not.

CHAPTER - IV
ANALYSIS AND INTERPRETATION OF DATA

The research study involved 204 University players from Mangalore University. These University students played different sports like Cricket, Kabaddi, Softball, Kho-kho, Football, Hockey. The data analysis contains two parts in this research. First part contains descriptive statistics

Descriptive Statistics

4.1 Education Level of Respondents

Table 4.1.1: Education Level of Respondents

	Frequency	Percent
Under-graduate Level	163	79.9
Post-graduate Level	41	20.1
Total	204	100.0

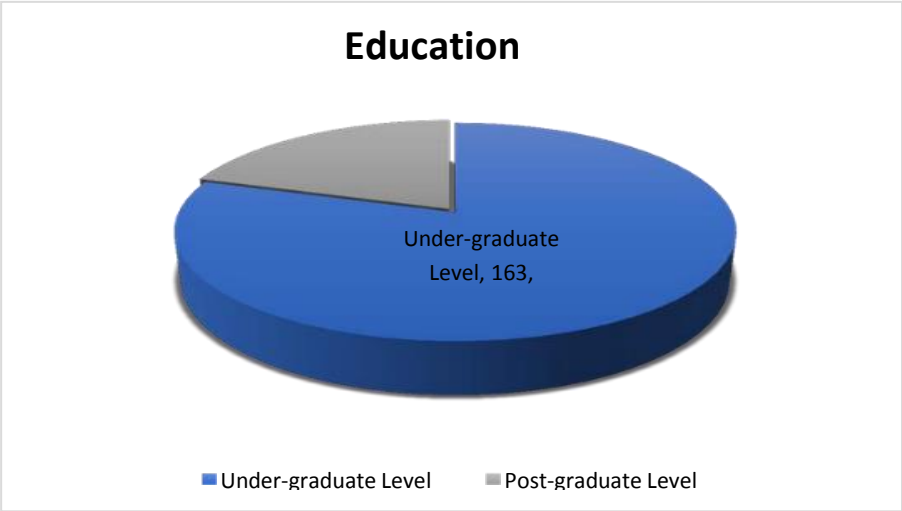

Figure 4.1.1: Education Level of Respondents

The respondents were all either under-graduates or post-graduates who took part in this survey. As the Table 4.1.1 and Figure 4.1.1 shows, out of 204 respondents, 163 (80%) were under-graduates while only 41 (20%) were either pursuing post-graduation or had completed post-graduation.

4.2 Type of Under-graduate Institution

Table 4.1.2: Type of Under-graduate Institution

	Frequency	Percent
Government College	22	11%
Government-aided College	48	24%
Private College	126	64%
Total	196	100%

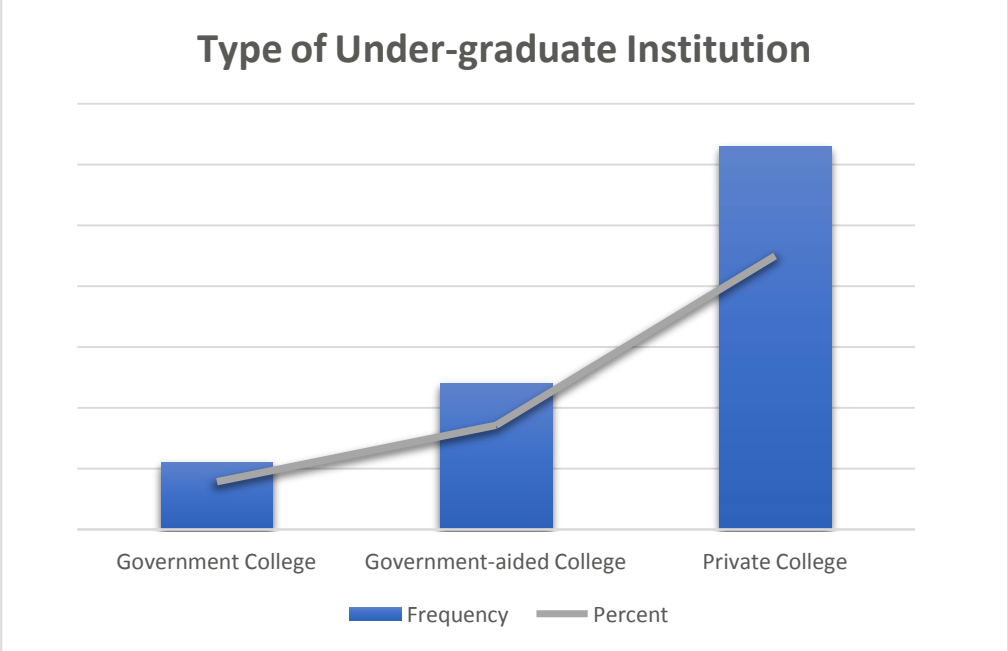

Figure 4.1.2: Type of Under-graduate Institution

Out of 204 respondents, as shown in Table 4.1.2, only 196 participants have responded with the type of institution they have completed their under-graduation. 8 participants have not answered. Most of the respondents, 126 (64%) out of 196 have graduated from private institutes while 48 (24%) have graduated from government-aided institutes and 22 (11%) of the respondents graduated from government institutes.

4.3 Type of Post-graduate Institution

Table 4.1.3: Type of Post-graduate Institution

	Frequency	Percent
Government College	24	58.5%
Government-aided College	1	2.4%
Private College	16	39.0%
Total	41	100.0%

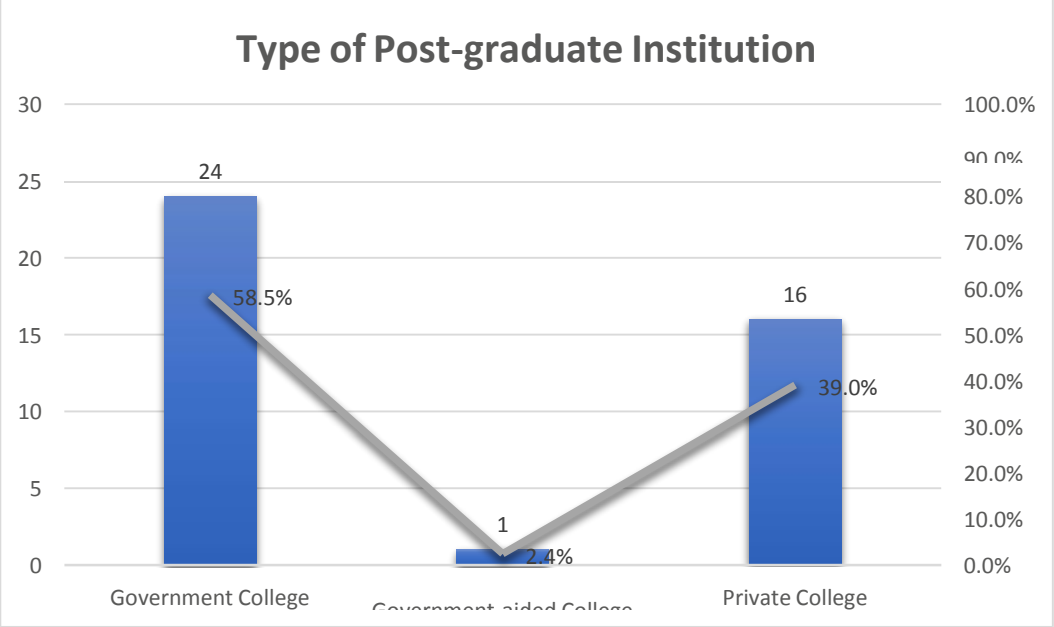

Figure 4.1.3: Type of Post-graduate Institution

Table 4.1.3 provides data regarding the 41 post-graduate students out of 204 respondents. Out of 41, most of them had completed their post-graduation from a government college. 24 (58.5%) of them had completed their post-graduation from government college and 16 (39%) of them had completed their post-graduation from a private college. Only 1 (2.4%) had completed from government-aided college.

4.4 Inferential Statistics

Factor Analysis

To begin, factor analysis is used to limit the number of socioeconomic variables to a manageable quantity. There were questions about having televisions, refrigerators, geysers, and other household things. The possession of household items was the subject of 17 questions. Factor analysis is used to break down these 17 variables into a smaller number of variables.

Initially, the Kaiser-Meyer-Olkin (KMO) test yielded a value of 0.850, which KMO describes as "meritorious" in their study. Table 1 shows this. This explains why the variables under investigation have a high level of association. Bartlett's test of sphericity has a significant value of 0.000, which is less than 0.05, indicating that the variables can be turned into factors, or 'factorizable' in other words. The following are the findings of both KMO and Bartlett's sphericity tests:

Table 4.2.1: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.850
Bartlett's Test of Sphericity	Approx. Chi-Square	1254.213
	df	136
	Sig.	0.000

The number of factors that must be constructed is determined by total varianceexplained using eigen values and a scree plot.

Table 4.2.2: Total Variance Explained

Total Variance Explained									
Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
	Total	**% of**	**Cumulative**	**Total**	**% of**	**Cumulative %**	**Total**	**% of**	**Cumulative %**
1	5.643	33.194	33.194	5.643	33.194	33.194	3.856	22.684	22.684
2	2.016	11.858	45.052	2.016	11.858	45.052	3.717	21.863	44.547
3	1.231	7.240	52.293	1.231	7.240	52.293	1.317	7.746	52.293
4	1.098	6.460	58.752						
5	.920	5.409	64.162						
6	.867	5.097	69.259						
7	.811	4.770	74.029						
8	.742	4.363	78.391						
9	.593	3.487	81.878						
10	.508	2.991	84.869						
Extraction Method: Principal Component Analysis.									

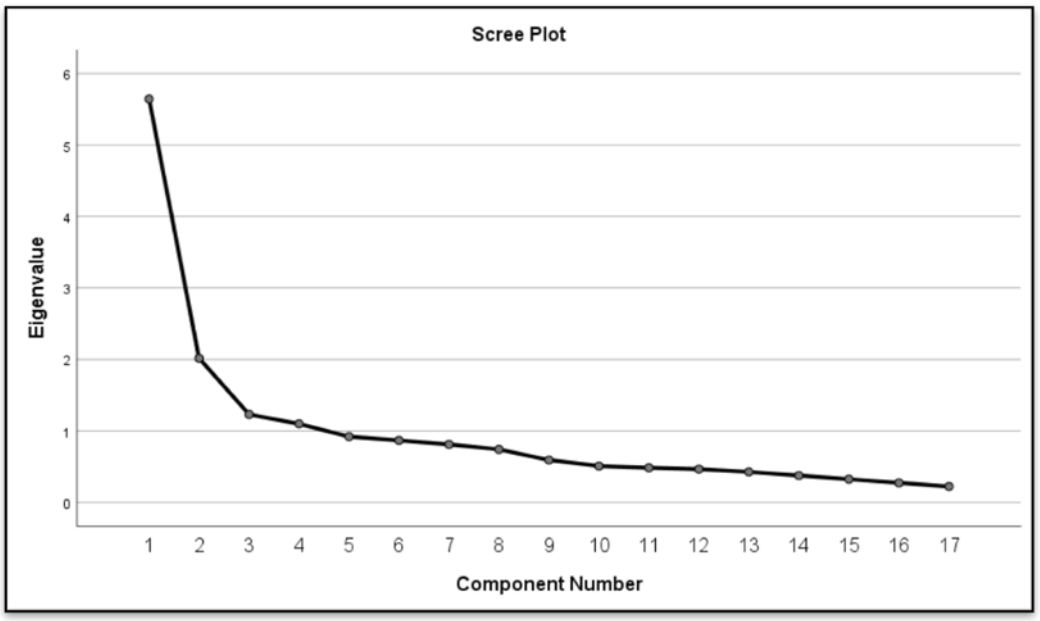

Figure 4.2.1: Scree plot

Though the eigenvalues table indicates that four factors can be produced, the scree plot only shows three factors because the elbow is more evident in the third variable than in the fourth. For four factors, the rotated component matrix is less obvious than for three factors. As seen in the rotated component matrix below, this study takes into account three aspects in the formation process:

Table 4.2.3: Rotated Component Matrix

Rotated Component Matrix			
	Component		
	1	2	3
Do you own a Music Player at home?	.743		
Do you own Air Cooler at home?	.688		
Do you own a Laptop?	.669		
Do you have furniture at home?	.663		
Do you own a RO Water Purifier at home?	.662		
Do you own AC at home?	.588		
Do you own a Desktop PC at home?	.452		
Own Smartphone		-.759	
Do you get daily newspaper at home?		.744	
Do you own a Washing Machine at home?		.686	
Do you own a Overhead Tank at home?		.658	
Do you own a Refrigerator at home?		.646	
Do you own a Geyser at home?		.611	
Do you own a vehicle?		.610	
Do you own a Gas Stove at home?			.752
Do you own a Mixer Grinder at home?			.697
Do you own a TV at home?			-.391
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			

The table above shows that three categories of household items can be distinguished: critical household items, essential household items, and desired household items. The VED classification of goods is more appropriate in this case. A gas stove, a mixer grinder, and a television are essential household appliances. Almost everyone has these essential items. This is a list of essential elements for survival. Essential products, on the other hand, are meant to make our lives easier. Smartphone, newspaper, washing machine, overhead tank, refrigerator, geyser, and owned automobiles are all necessary equipment. While music players, air conditioners, laptops, furnishings, RO water purifiers, desktop computers, and air conditioners are all desirable, life can go on without them. As a result, the following is the factor nomenclature:

Table 4.2.4: Latent Variables

Vital Items	**Essential Items**	**Desirable Items**
Gas Stove	Smartphone	Music player
Mixer Grinder	News paper	Air cooler
TV	Washing Machine	Laptop
	Overhead Tank	Furniture
	Refrigerator	RO water purifier
	Geyser	Desktop PC
	Vehicles owned	AC

Reliability Analysis

Cronbach's alpha was calculated for different sets of variables.

Table 4.2.5: Cronbach's Alpha

Construct	**Cronbach's Alpha**
Vital Items	0.650
Essential Items	0.842
Desirable Items	0.802

The Cronbach's alpha values for all the three constructs provide evidence, in Table 4.2.5, regarding how closely the items in each of these categories are closely related to each other. Implicitly, it provides a value for internal consistency that exists between the items selected in each of the categories. Cronbach's alpha value are 0.65 for vital items, 0.842 for essential items and 0.802 for the desirable items.

Chi-Square Tests

Objective 1: To study the impact of socio-economic factors on the academic achievement of Mangalore University sports person..

Hypothesis 1

H_{01}: Academic performance is independent of possession of number of essential household items.

H_{a1}: Academic performance is not independent of possession of number of essential household items.

Table 4.2.6: Chi-square Test for Hypothesis 1

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	9.288	12	.678

The amount of necessary home items held by sportspersons were compared to their academic achievement in their under-graduate degree using a Chi-square test. The Chi-square test output in Table 4.2.6 has a Chi-square value of 9.288 and a significance level of 0.678. Do not reject the null hypothesis, which states that academic achievement in an undergraduate degree programme is unrelated to the ownership of a sufficient quantity of essential household items, because the significance level is far greater than the alpha level of 0.05. It is reasonable to conclude that having these fundamental household products will have no impact on pupils' academic achievement.

Hypothesis 2

H_{02}: Academic performance is independent of social status of the family. H_{a2}: Academic performance is not independent of social status of the family.

Table 4.2.7: Chi-square test for Hypothesis 2

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	6.96	6	0.325

The social status of Mangalore University sportspersons was compared to their academic success in their under-graduate degree using the Chi-square test. Table 4.2.7 Shows the Chi-square test result, which has a Chi-square value of 6.96 and a significance level of 0.325. Because the significance level is far greater than the alpha threshold of 0.05, do not reject the null hypothesis, which states that a student's success in an undergraduate degree programme is unaffected by his or her socioeconomic position. It can be deduced that a student's social status has little bearing on their academic achievement. Students' academic performance is distributed proportionately whether they come from a low-income household or a high-income family.

Objective 2: To study the impact of socio-economic factors on the sportsachievement of Mangalore University sports persons.

Hypothesis 3

H_{03}: Interest in sports is independent of possession of number of essential household items.

H_{a3}: Interest in sports is not independent of possession of number of essentialhousehold items.

Table 4.2.8: Chi-square Tests for Hypothesis 3

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	13.96	8	0.083

The amount of necessary home items owned by sportspersons were compared to their interest in sports using a Chi-square test. Table 4.2.8 shows the Chi-square test result, which has a Chi-square value of 13.96 and a significance level of 0.083. Because the significance level is larger than the alpha level of 0.05, the null hypothesis, that sports interest is independent of the number of basic home items, is not rejected. It can be deduced that having these necessary household items has no bearing on the development of a sporting passion. Any kid, regardless of what kind of household items they have, can develop an interest.

Hypothesis 4

H_{04}: Interest in sports as a factor of achievement in sports is independent of social status of the family.

H_{a4}: Interest in sports as a factor of achievement in sports is not independent of social status of the family.

Table 4.2.9: Chi-square Tests for Hypothesis 4

Chi-Square Tests			
	Value	**df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	3.049	4	0.55

A Chi-square test was used to determine the relationship between sportspersons' social standing and their level of interest as a determinant in their athletic achievement at Mangalore University. Table 4.2.9 shows the Chi-square test result, which has a Chi-square value of 3.049 and a significance level of 0.55. Because the significance level is far greater than the alpha level of 0.05, do not reject the null hypothesis, which states that a student's interest in sports is unrelated to his or her socioeconomic position. It can be

deduced that a student's social class has little bearing on his or her interest in sports. Whether a student comes from a low-income or high-income family, their interest in sports is evenly distributed.

Correlation Analysis

Objective 3: To study the correlation between different academic and sportsfactors.

Hypothesis 5:

H_{05}:There is no correlation between parents influence as a factor on academic performance and parents influence as a factor on sports performance.

H_{a5}: There is correlation between parents influence as a factor on academic performance and parents influence as a factor on sports performance.

The analysis provides the following output:

Table 4.2.10: Correlation between Influence of Parents on Academic and Sports Performance

Correlations		
		Influence of Parents as a Factor of Sports Achievement
Influence of Parents as a Factor of Academic Achievement	Pearson Correlation	0.612
	Sig. (2-tailed)	0.000
	N	204

The Table 4.2.10 shows that there is strong positive correlation between influence of parents on academic performance of sportspersons and the influence of parents on sports performance. Correlation coefficient (R) is 0.612 and the p-value (significance value) is 0.000 which is less than 0.05. Since the p-value of 0.000 is less than 0.05, reject the null hypothesis. The inference is that there is correlation between these two variables. Parents who motivate sportspersons for the academic performance of sportspersons, equally motivate them to perform in sports too. There is balanced and equal importance provided by parents on both academic as well as sports performance of their ward.

Hypothesis 6:

H_{06}: There is no correlation between possession of vital household items and numberof sports played by sportsperson

H_{a6}: There is correlation between possession of vital household items and number of sports played by sportsperson

The analysis provides the following output:

Table 4.2.11: Correlation between possession of vital household items and number of sports played by sportsperson

Correlations		
		Vital items
Number of sports played	Pearson Correlation	0.016
	Sig. (2-tailed)	0.815
	N	204

The Table 4.2.11 shows that there is very low positive correlation between the vital items possessed or owned by sportsperson and the number of sports they played. Correlation coefficient (R) is 0.016 and the p-value (significance value) is 0.815 which is very high and higher than 0.05. Since the p-value of 0.815 is more than 0.05, accept the null hypothesis. The inference is that there is absolutely no correlation between these two variables. Vital items are necessity, so it does not influence the number of sports sportspeople play. And this is evident in the correlation analysis.

Hypothesis 7:

H_{07}:There is no correlation between possession of essential household items and number of sports played by sportsperson

H_{a7}:There is correlation between possession of essential household items andnumber of sports played by sportsperson

The analysis provides the following output:

Table 4.2.12: Correlation between possession of essential household items and number of sports played by sportsperson

Correlations		
		Essential items
Number of sports played	Pearson Correlation	-0.147
	Sig. (2-tailed)	0.036
	N	204

Table 4.2.12 shows that there is significant correlation between essential household items sportspeople possess and the number of sports they play. Since the p-value is 0.036 which is less than 0.05, reject the null hypothesis and accept the alternate hypothesis. The inference is that there is correlation between the possession of essential household items and the number of sports played by sportspeople and that correlation is negative as seen by the Pearson correlation coefficient which is -0.147. Though these two variables are correlated, they are negatively correlated which means that as the number of essential household items increase, the complacency sets in and the number of sports played by sportspersons decrease.

Hypothesis 8:

H_{08}: There is no correlation between possession of desirable household items and number of sports played by sportsperson

H_{a8}: There is correlation between possession of desirable household items andnumber of sports played by sportsperson

The analysis provides the following output:

Table 4.2.13: Correlation between possession of desirable household items and number of sports played by sportsperson

Correlations		
		Desirable items
Number of sports played	Pearson Correlation	-0.023
	Sig. (2-tailed)	0.744
	N	204

Table 4.2.13 shows that there is no significant correlation between desirable household items sportspeople possess and the number of sports they play. Since the p-value is 0.744 which is more than 0.05, accept the null hypothesis. The inference is that there is no correlation between the possession of desirable household items and the number of sports played by sportspeople. The correlation is negative as seen by the Pearson correlation coefficient which is -0.023. These two variables are negatively correlated which means that as the number of desirable household items increase, the number of sports played by sportspersons decrease. Though they are negatively correlated, the strength of correlation is not significant.

Hypothesis 9:

H_{09}: There is no correlation between social status of the sportsperson and theacademic performance of the sportsperson.

H_{a9}: There is correlation between social status of the sportsperson and the academic performance of the sportsperson.

Table 4.2.15: Spearman's Correlation between social status of the sportspersonand academic performance of the sportsperson

Spearman's Rank Correlation (rho)		
		Academic Performance at Under-graduate Level
Social Status of the Family	Correlation Coefficient	0.113
	Sig. (2-tailed)	0.017
	N	204

The result of Spearman's correlation between social status and academic performance of the sportsperson is shown in Table 4.2.15. The p-value is 0.017 which is less than 0.05 implies to reject the null hypothesis and accept the alternate hypothesis. The inference is that there is significant correlation between social status and academic performance of the sportsperson. But the strength of correlation as given by Spearman's Rank Correlation is 0.113 which means there exists low positive correlation between social status and academic performance of the sportspersons.

Objective: To establish relation between social status and sports performance

Table 4.2.16: Social Status and Sports Performance

Social Status of the Family * Number of sports played Crosstabulation										
	Number of sports played									
	One		Two		Three		Four		Total	
	N	%	N	%	N	%	N	%	N	%
Lower class (BPL Cardholder)	4	2.0%	23	11.3 %	21	10.3 %	12	5.9%	60	29.4 %
Middle class	13	6.4%	37	18.1 %	42	20.6 %	24	11.8 %	116	56.9 %
Upper class	1	0.5%	13	6.4%	11	5.4%	3	1.5%	28	13.7 %
Total	18	8.8%	70	35.8 %	72	36.3 %	39	19.1 %	204	100.0 %

It appears that most of the sportspersons play 2 or 3 sports in all categories of social strata. 23 (11.3%), 21 (10.3%) of 204 respondents play two or three sports respectively in lower class families with BPL card. 37 (18.1%) and 42 (20.6%) of 204 respondents are from middle class families who play two and three games respectively. 13 (6.4%) and 11 (5.4%) from upper class families play 2 and 3 sports respectively. There are few who play four sports too. 12 (5.9%), 24 (11.8%) and 3 (1.5%) who play 4 sports from lower class, middle class and upper-class families respectively. There are quite a few who play single sport only. These must be highly focused sportspeople or they are not interested in playing more than one sport. 4 (2%), 13 (6.4%) and 1 (0.5%) play single sport.

Hypothesis 10:

H_{010}: There is no correlation between social status of the sportsperson and the sport performance of the sportsperson.

H_{a10}: There is correlation between social status of the sportsperson and the sport performance of the sportsperson.

Table 4.2.17: Spearman's Correlation between social status of the sportspersonand sport performance of the sportsperson

Spearman's Correlations (rho)		
		Number of sports played
Social Status of the Family	Correlation Coefficient	-0.028
	Sig. (2-tailed)	0.691
	N	204

The result of Spearman's correlation between social status and academic performance of the sportsperson is shown in Table 4.2.17. The p-value is 0.691 which is more than 0.05 implies to not to reject the null hypothesis. The inference is that there is no significant correlation between social status and sport performance of the sportsperson. The strength of correlation as given by Spearman's Rank Correlation is -0.028 which means there is very low negative correlation between social status and sport performance.

CHAPTER - V

SUMMARY, FINDINGS AND CONCLUSION

5.1 Summary

Sports in India is always treated like a second fiddle. Very rarely do we find sporting gems like Neeraj Chopra, Abhinav Bindra, Saina Nehwal breaking the barriers and achieve something that is highly improbable in Indian sports environment. Recent performance in Olympics provides evidence that importance to sports that is meted out now is not same as it was in the past. 'Fit India' campaign by Government of India is a step towards making India a star performer in sports and to keep the youth fit, healthy and energeticalways. There are several factors that influence students in universities to choose sports as a career option. There are several other factors that influence students in universities to not to choose sports as a career option, at the same time.

This study is carried out among students of sports participants at Mangalore University. The data collected provides different insights regarding various factors that affect the performance of students in academics and in sports. There were several other qualitative insights which the data cannot capture. While interacting with the respondents, they provide certain information beyond the questions of the questionnaire. Such insights will be of precious nature and have been retro-fitted wherever deemed necessary in the findings.

The findings can help the university administrators in designing policy for sportspersons. Policy decisions like fixing scholarship based on sports performance, academic performance, and on both sports as well as academic performance, with reference to the socio-economic factors, can be decided using the findings provided in this study.

5.2 Findings

Demographic Factors

These findings related to demographic factors are collected from sportspersons during the period of study at Mangalore University. The findings related to demographic factors are listed below:

1) Most of the sportspersons (47%) live with a family where family size is five members or more than five members in a family. This is an important observation as the struggle to manage the family hinders the sports and academic performance of the sportspersons. It also exerts unnecessary stress on the sportspersons which in

turn affects performance in academics and sports. Smaller the family, better the performance of sportspersons in academics and sports.

2) 84% of the sportspersons live in a house owned by the family. Very few sportspersons live in a rented house. Living in a rented house adds another level of stress on the academic and sports performance. Since the study is done in Tier-II city, most of the sportspersons own a house but the results can vary from a study done in a metro like Bengaluru.

3) More than 85% of the sportspersons have single earning member in the family. Earlier finding had mentioned about most of the households having more than 5 members in a family. A family with five or more than five members but with a single earning member in the family adds up to the stress of family members. This obviously affects the performance of the sportspersons in their academics and sports activities. Such situations usually force the sportsperson to look for ways to earn and manage the family than on performing in sports or academics. Financial need becomes one of the factors, in several cases, influencing the performance in sports. Though such situations can affect the performance in sports negatively, the financial need can influence a sportsperson to perform positively too in certain circumstances.

4) In 78% of the households, the single earning member of the family is father and in very few households, single earning member is mother. In only 10% of the total households, both mother and father were earning members. In tier-II cities, usually only father works, and mother takes care of the house. While this might not be the scenario in a metro city. In metro cities, usually both mother and father will be earning members in the family. And only in 3% of total number of households, there is another earning member in the family other than mother and father.

5) Almost 60% of the households surveyed belonged to middle class, as defined by the income of the family. The family income from all the earning members of the family is well above the BPL limit.

Socio-economic Factors

1. More than 70% sportspersons were owners of smartphone. This is present-day indicator of socio-economic status of an individual. It has become a status symbol. Owning a smartphone is common but owning a particular brand of smartphone symbolizes socio-economic status of an individual. Costlier the smartphone, high-end smartphone, higher the socio-economic status in the society. There are several advantages of owning a high-end smartphone but more than its utility, it is bought

to showcase the economic status in the society in India.

2. 25% of the sportsperson did not avail any financial support from any sources for their education purpose. There were 44% of the sportspersons who used their sports performance and other eligibility requirements to avail the scholarship facility to pursue their education. This is an indicator of use of excelling in sports during graduation or during post-graduate studies. There were 27% of the sportspersons who had to avail educational loan to pursue their education. This is a statistic one must be worried about as it directly affects the morale of a household in India. It exerts lot of financial stress on already over-burdened lower-income and middle-income households in India. It can be disastrous and has the possibility to break a family down if a critical illness gets added to already burdened household.
3. More than 95% of the households of sportspersons had three vital items for running a household: Television, Gas stove and Mixer Grinder. 97.5% of households own a television set, 96.1% of households own gas stove and 96.1% of households own mixer grinder. These three are most vital items to run any household. The balance percentage of households must be sportspersons who are staying in some hostel or a paying guest facility, single and unmarried cases.
4. There were lesser number of households owning essential items like geyser, overhead tank, newspaper, refrigerator, washing machine. Approximately 43% households own a geyser, 54% households own overhead tank. It has been observed in Indian tier-II cities, households have concrete storage tanks inside their houses than an overhead tank. This is the reason for the balance of 46% of households not having an overhead tank. 55% of the households subscribe for the newspapers. This is a good indicator of growth of a community. Subscribing to a newspaper by households is a good economic sign. This is because even with the information overload due to social media sites, households subscribing to a newspaper is socio-economic indicator. 91% of households own a refrigerator. Owning a refrigerator is almost a necessity now, just like mixer grinder. Approximately 55% of households own a washing machine. Very soon even owning a washing machine by households even in tier-II cities of India is going to be a very common act. It is almost a necessity just like refrigerator.
5. Then there are desirable items which guarantees socio-economic growth of few of the households. Though these are not essential items for a household to run, the

possession of these items symbolizes higher socio-economic status in the community.

6. The desirable items are RO Water Purifier, Furniture, Music Player, Desktop PC, Laptop, AC, Air Cooler.
7. Only 24% of the households own RO water purifier. 29% of the households own furniture. Only 10% of the households own a music player. Music player is not at all an essential item in most of the households in the presence of so many other devices. Only 2.5% of the households own a desktop PC while 30% of the households own a laptop. Laptop is preferred by most of the households over desktop PC. Surprisingly, 18% of the households are owning Air conditioner while only 11% of the households own air coolers.

Academic Factors

1) 32% of the fathers of sportspersons have completed their undergraduate program. Only 4% of the fathers have completed post graduate program. 36% of fathers have completed university level education and the balance 64% of fathers have not completed university level education but only pre-university level education.
2) Only 10% of mothers of sportspersons have completed university level education – undergraduate and post-graduate combined. Approximately, 69% of mothers have completed only till school level and only 21% till pre-university level. Most of the mothers are caretakers at home.
3) Most of the sportspersons have completed their university level education with first class marks. This is a common phenomenon in tier-II cities that parents would be having less educational qualifications, but their wards will be having better educational qualifications. Though education does not mean literacy or knowledge, it just means the university degree. Reason for this is hat people still behave like illiterate people even after undergoing university education. Very few sportspersons, 27% of the total number of sportspersons, have passed with second class marks in university level education.
4) Most of the sportspersons, 44%, have been positively influenced by parents for their academic performance. 30% of the sportspersons have been highly significantly influenced by their parents for their academic performance. In total, it is approximation 75% of the sportspersons who feel they have been greatly influenced by their parents. It is the balance 25% who do not attribute their academic performance to their parents. It could be because of several reasons. When a household is financially stressed, parents usually tend to concentrate more

on running the household than on the education of their ward. They (wards) must take care of their education on their own with little support from parents. Usually, it is an unintentional act by parents. It is due to sheer pressure that they behave in this manner.

5) 44% of the sportspersons feel their teachers have influenced significantly or highly significantly for their academic performance. Balance 56% of the sportspersons feel their teachers may not have influenced their academic performance. It is usual pattern in India that teachers at school level tend to support students who perform academically well than those who excel in sports. Sports is not a priority at school level. So, there is a high percentage of students involved in sports who might be ignored by their teachers.
6) 64% of the students have performed better in academics because of financial stress at home. There are households where the sportspersons cannot perform better in academics because of financial stress and on the other hand, there are many households where sportspersons perform better because of the same financial strain. They want to come out of that situation and want their next generation not to suffer like them. There are several success stories in India.
7) Undoubtedly, the financial need happens to be one of the biggest motivators of most of the Indians to perform better in academics. Approximately, 64% of the sportspersons also feel that financial needhave influenced their performance in academics. Next generation must not suffer is one of the biggest motivators of most of the Indian middle and lower-income families.
8) Interest in academics itself acting as motivator to perform better in academics is less than all the previous factors influencing the academic performance of sportspersons. Most of the sportspersons in universities are usually having spirit to excel in sports more than in academics. If they are performing better in academics, the reason could be any of the reasons mentioned in previous points than the interest in academics.
9) It is interesting to find that most of the sportspersons have won prizes and awards even in academics. This is an interesting fact because it might help the administration of the universities to stress on sports activities of the students for them to excel in academics too. Concentrating only on academics may not be right approach. If a student excels in sports, automatically excels in academics, as the winning behavior seeps into academics too, then this trend would divert most of

the university students to take interest in sports too. 79% of the respondents have won either a prize or an award for their performance in academics.

10) The findings clearly indicate that there is impetus provided by universities in India to participate in sports activities. It is also observed that interest in sports also improves their performance in sports.

Sports Factors

1) Approximately 64% of the sportspersons feel that their parents influenced significantly for their performance in sports. 36% of sportspersons feel that their parents did not influence their performance in sports. 36% is very high percentage points because most of the parents want their wards to perform in academics than in sports. Parents usually feel participating in sports cannot provide good career to their wards.
2) Coach influencing sportspersons to excel in sports must be significantly high. But the findings here suggest otherwise that most of the students, approximately, 47% of the sportspersons feel that coach's influence on them has been just average. It is strange phenomenon in India. Usually, instead of supporting students to participate in sports, they behave in a manner that students are skeptical about being part of sports department. Change at department level is necessary. One positive point is 53% of the sportspersons feel that their interest in sports is because of coach's support. This is what is required to happen to balance 47% of the sportspersons too. There is a urgent need to train cohort of coaches to be empathetic and encouraging towards students who are interested in sports.
3) 86% of the sportspersons feel that they wanted to excel in sports because of financial need. This is one of the highest motivating factors for the performance of sportspersons in both academics and in sports. Many of the students who feel their performance is not up to the mark, mostly tend towards sports because of survival instincts. There are several sportspersons who join sports even when their academic performance is good. These perform better both in academics as well as sports.
4) Another highest motivating factor and the factor which send positive scope about performance of students in sports is the interest in sports. It is due to sheer interest in sports that has pulled several students towards sports department.

5.3 Conclusion

The findings of the study have been mostly positive. The socio-economic indicators all direct towards improvement in the lives of people. Lives of sportspersons is also improving causing interest in potential future students who will be entering university to pursue sports related courses. This can cause students from other departments as well looking at sports as an option for their career prospects. There are several reasons for a student to choose sports as their career choice. Socio-economic factors are the main causes for their performance in sports. The economic conditions of sportspersons are improving in India because of several career options like sponsorships, advertisements, sports centers, fitness centers, premier leagues of various sports like kabaddi, football apart from cricket, to name a few. With new kind of opportunities in sports, admissions for sports related university degree courses must have increased.

Several researchers have carried out various kind of research work related to socio-economic factors and the way they influence the performance of sportsperson in academics and sports. The research work carried out by various researchers cover variety of aspects related to sports and academics from different countries and different regions of the world. This study is like several of such previous research work but limited to sportspersons in Mangalore University.

In this study, it is observed through findings that there is correlation between social status of the sportsperson and their academic performance. Lower-income, middle class and upper-class families decide the social status of households. At the same time, it was also found that there is no correlation between social status of the sportsperson and their sports performance. Social status of households is also improving in Indian context. With improving social status, there is increase in awareness of health, fitness, and sports related activities in India. This has given rise to completely new industries which did not exist a decade ago. The country is witnessing a fitness and sports revolution. There are several gyms even in tier-II and tier-III cities that have sprung due to this new awareness among the public. The younger generation has initiated several start-ups in these new-age industries related to fitness and sports.

With increase in new types of sports and fitness related businesses and opportunities, universities need to change the sports policies to encourage involvement of a greater number of students into sports and considering sports as career option. There are several liberal universities coming up in different parts of the country offering courses in managing sports or sports administration. Government universities too need to offer sports management related courses to the less privileged students. Young entrepreneurs are

building interesting sports and fitness related start-ups. Universities must encourage such sports entrepreneurs by providing them support through incubation centers. Part of funds which universities get must be used in setting up and supporting start-ups and sports related start-ups.

Apart from universities, state governments must also come up with various schemes like 'Fit India Movement' and 'Khelo India Movement' of the central government and provide incentives to the students who get involved in sports and fitness related activities. University Grants Commission (UGC) has also released notification in recent times to make fitness compulsory not only for students but for faculty members too.

There is less research work carried out with sports and fitness related topics as these are new-age industries, new-age activities and they are still in nascent stage. There are immense research opportunities to conduct longitudinal studies too. There is lot of scope in extending the research work related to sports and academics influenced by socio-economic factors in various other regions and parts of the country and Karnataka state.

5.4 Recommendations

- Similar studies may be conducted on sportspersons of Mangalore University on other psychological variables related to performance.
- Similar studies can be conducted on sports participants of other universities in Karnataka state.
- Study may be conducted on sub juniors, juniors, seniors and international players separately.
- Study can be conducted on low socio economic status group on sports participation.
- A similar study can be conducted on large sample, covering all the states of Karnataka.
- The present study is limited to some variables i.e. sports performance, academic achievement and socioeconomic status of sports persons. Further research may also be concentrated on other variables of the subjects involved.
- It is suggested that impact of socioeconomic status on sports performance of various games and sports can be investigated to make better sports polices.

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